

Line-Performance/Line-Observation Course for Part 142 Flight Instructors, Air Carrier Contract Flight Instructors (Simulator) and Air Carrier Contract Check Pilots (Simulator)

A. **Background.** The guidelines described below may be used by 14 CFR part 91 Subpart K (91K), 121 and 135 air operators as well as part 142 training centers to develop programs suitable for approval by the FAA Administrator. This policy statement has been uploaded to the Part 142 Training Center web site under the heading Part 142 Training Center Policy (www.faa.gov/pilots/training/part_142) and will be incorporated into formal inspector guidance.

Part 91K, 121 and 135 air operators who meet the provisions of the guidance contained in this policy may develop a Line Operational Simulation (LOS) program for submission to their Principal Operations Inspector (POI). Part 142 air agencies may do likewise for submission to their Training Center Program Manager (TCPM). The POI or TCPM will evaluate all proposals against the attached LOS requirements and make a determination as to the suitability of the program. When approved, the LOS program may be used to meet the requirements of the applicable regulation. It should be noted that not all operators will meet the qualifying conditions of this policy. For example, operators with aircraft that have cockpit jump seats or that operate aircraft approved for single pilot operations may not qualify.

B. **Objective of a Line-Performance or Observation Program:** To allow part 142 flight instructors, contract flight instructors (simulator) and contract check pilots (simulator) to remain current and familiar with current procedures and special emphasis items, recent changes in the NAS, ground operations and ATC phraseology.

There are a number of reasons why it is necessary for simulator instructors and check airmen to periodically experience actual inflight operations under the appropriate operating rule. Among these are retaining close familiarity with:

- Requirements for actual aircraft operations (flight planning, performance calculation, fuel, weight and balance, ground and flight operations, maintenance issues, etc.)
- National Airspace System (NAS) and ATC communications (enroute and terminal navigation and procedures in controlled and uncontrolled airspace, ground/taxi operations, etc.)
- Standard operating procedures, regulatory operating requirements, Operations Specifications requirements and limitations, crew functions and responsibilities, etc.

For those persons who do not regularly fly as line pilots, exposure to these areas of operation on a recurring basis provides the opportunity to experience realistic operations and apply that experience to the simulator training and checking environment.

C. **Use of an Operator's LOS Program.** If an air operator has been authorized to contract with a part 142 training center and has additionally been authorized to use center personnel as contract instructors or contract check airman/check pilots, those contract individuals may also use the

operator's approved LOS to qualify under the operator's program. Training center personnel that are participating as contract instructors or contract check pilots in an operator's line-performance or observation program may be considered to have met the line-performance or observation requirements for other operators of the same CFR part as well as of part 142.

D. Definitions, Applicability and Exclusion: Employees of a part 142 training center who are properly nominated, trained, qualified and authorized by an air operator's POI may fulfill the role of a company check pilot. Such persons are referred to as "contract check pilots" or "contract check airmen." The terms "contract check pilot" and "contract instructor" have been developed to distinguish between a check pilot employed by the operator (check pilot) and one who is not an employee of the operator (contract check pilot). This distinction is necessary to ensure operators properly train and qualify training center employees to act on their behalf as contract instructors/check pilots.

91K uses the term "check pilot" when referring to an individual who has been authorized by a POI to conduct certain tests and checks on behalf of the operator. Parts 121 and 135 use the terms "check airman" and "check pilot" when referring to individuals who have been authorized to conduct certain tests and checks on behalf of the operator. Part 125 uses the term "check airman" throughout. As a matter of Air Transportation Division policy, the terms "check airman" and "check pilot" are interchangeable and considered to be synonymous.

"Eligible aircraft" in the context of this policy statement means an airplane that does not have a cockpit jump seat. It may also be construed to apply to an airplane that is operated at a remote distance from a training center or that, for sound operational reasons is otherwise not reasonably available for use by training center personnel.

NOTE: Aircraft that are located within the continental United States are not considered to be at a remote distance from a domestic training center.

Within the above guidelines, the determination of "eligible aircraft" is at the discretion of the POI and, where appropriate, the TCPM. Any questions regarding interpretation of the term "eligible aircraft" should be referred to the Air Carrier Training and 142 Training Center Branch, AFS-210, through the appropriate Region.

"Operator" as used in this document refers to a part 121 or 135 air carrier. It also means a fractional ownership program manager conducting flights under part 91K.

This policy statement:

- Applies to simulator only flight instructors and contract check pilots.
- Does not apply (and is not necessary for) instructors or contract check airmen who are qualified to operate the actual aircraft.
- Does not apply to ground instructors. (Ground instructors are not required to comply with the line-performance or observation requirements of an air carrier or training center providing they do not operate the actual aircraft or conduct flight instruction as part of their assigned duties).

- Does not apply to line checks conducted pursuant to 121.440 and/or 135.299. Such line checks must be conducted in an aircraft, in flight, by an appropriately qualified FAA inspector or appropriately qualified and authorized check airman as specified in the applicable operating rule.

E. **Regulations Affected.** Only the following 14 CFR regulations are affected by this policy statement:

§ 91.1089 Qualifications: Check pilots (aircraft) and check pilots (simulator).

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(f) A check pilot (simulator) must accomplish the following—

(1) Fly at least two flight segments as a required crewmember for the type, class, or category aircraft involved within the 12-month period preceding the performance of any check pilot duty in a flight simulator; or

(2) Before performing any check pilot duty in a flight simulator, satisfactorily complete an approved line-observation program within the period prescribed by that program.

§ 121.411 Qualifications: Check airmen (airplane) and check airmen (simulator).

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(f) A check airman (simulator) must accomplish the following—

(1) Fly at least two flight segments as a required crewmember for the type airplane involved within the 12-month period preceding the performance of any check airman duty in a flight simulator; or

(2) Satisfactorily complete an approved line-observation program within the period prescribed by that program and that must precede the performance of any check airman duty in a flight simulator.

§ 135.337 Qualifications: Check airmen (aircraft) and check airmen (simulator).

...

(f) A check airman (simulator) must accomplish the following—

(1) Fly at least two flight segments as a required crewmember for the type, class, or category aircraft involved within the 12-month preceding the performance of any check airman duty in a flight simulator; or

(2) Satisfactorily complete an approved line-observation program within the period prescribed by that program and that must precede the performance of any check airman duty in a flight simulator.

§ 142.53 Training center instructor training and testing requirements.

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(b) In addition to the requirements of paragraphs (a)(1) through (a)(7) of this section, each certificate holder must ensure that each instructor who instructs in a flight simulator that the Administrator has approved for all training and all testing for the airline transport pilot certification test, aircraft type rating test, or both, has met at least one of the following three requirements:

(1) Each instructor must have performed 2 hours in flight, including three takeoffs and three landings as the sole manipulator of the controls of an aircraft of the same category and class, and, if a type rating is required, of the same type replicated by the approved flight simulator in which that instructor is designated to instruct;

(2) Each instructor must have participated in an approved line-observation program under part 121 or part 135 of this chapter, and that—

(i) Was accomplished in the same airplane type as the airplane represented by the flight simulator in which that instructor is designated to instruct; and

(ii) Included line-oriented flight training of at least 1 hour of flight during which the instructor was the sole manipulator of the controls in a flight simulator that replicated the same type aircraft for which that instructor is designated to instruct; or

(3) Each instructor must have participated in an approved in-flight observation training course that—

(i) Consisted of at least 2 hours of flight time in an airplane of the same type as the airplane replicated by the flight simulator in which the instructor is designated to instruct; and

(ii) Included line-oriented flight training of at least 1 hour of flight during which the instructor was the sole manipulator of the controls in a flight simulator that replicated the same type aircraft for which that instructor is designated to instruct.

F. PART 142 FLIGHT INSTRUCTORS (SIMULATOR ONLY): All such flight instructors (including contract flight instructors) must meet the requirements of part 142.53(b) each 12 calendar months. To do so, four options are available:

1. Perform 2 hours in flight, including three takeoffs and three landings as the sole manipulator of the controls of an aircraft of the same category and class, and, if a type rating is required, of the same type replicated by one of the flight simulators in which that instructor is designated to instruct.
2. Participate in any approved inflight line-observation program under part 121 or part 135, consisting of at least two flight segments and accomplished in the same airplane type represented by one of the flight simulators in which that instructor is designated to instruct. This option must also include line-oriented flight training of at least 1 hour during which the instructor is the sole manipulator of the controls in a flight simulator that replicates one of the types of aircraft in which he or she is designated to instruct. Except for duration, this line-oriented flight training session must incorporate the elements of the Alternate Method described in paragraph I.
3. Participate in an inflight observation training course approved under part 91K or part 142 that consists of at least 2 hours of flight time in an airplane of the same type as the airplane replicated by the flight simulator in which the instructor is designated to instruct. This option must also include line-oriented flight training of at least 1 hour during which the instructor is the sole manipulator of the controls in a flight simulator that replicates the same type aircraft in which he or she is designated to instruct. Except for duration, this line-oriented flight training session must incorporate the elements of the Alternate Method described in paragraph I.
4. **Alternate method:** If a flight instructor instructs only in simulators that replicate eligible aircraft, and if the training center holds an appropriate and current deviation, that instructor may meet the requirements of 142.53(b)(1) by the alternate method described in paragraph I below.

G. CONTRACT FLIGHT INSTRUCTORS (SIMULATOR) WHO INSTRUCT AIR OPERATOR CREWMEMBERS: Because these persons have qualified under part 142, they must meet the same requirements as listed in paragraph F above and do not have to additionally meet the requirements of air operator rules. If the flight instructor qualifies by the alternate method (paragraph F4 above), however, the LOS described in paragraph I., must incorporate operator-specific procedures for one operator for whom that person is designated to instruct. This includes (but is not limited to) areas such as weight and balance, performance, checklist procedures, callouts and standard operating procedures.

H. CONTRACT CHECK PILOTS (SIMULATOR): Check pilots do not exist in part 142. They are strictly an element of an air operator's training/checking program. Because of this, check airmen must meet the line-performance or observation requirements of the operators' operating rule (91K, 121 or 135) rather than part 142. In order for an operator to have a check airman the operator must have an approved program to train, check and qualify those

persons. In all cases it is the operator's responsibility to train and qualify contract personnel under their approved program. That program must include the manner in which the in-flight experience requirement involving aircraft operation or line-observation will be accomplished. In the case of check pilots that are directly employed by the operator the operator is expected to develop a realistic and efficient way to comply with the in-flight experience requirements. Contract check pilots must meet one of the following requirements each 12 calendar months:

1. Fly at least two flight segments as a required crewmember in the same category and class (and type, if applicable) in one of the types of airplanes in which that person is an authorized check airman.
2. Satisfactorily complete an approved in-flight line-observation program (consisting of two flight segments minimum) for one operator for which that person is an authorized check airman.
3. **Alternate method:** If the contract check pilot is authorized to perform checking functions only in simulators that replicate an eligible aircraft, that check airman may meet the requirements of 91.1089(f)(1), 121.411(f)(1) or 135.338(f)(1) by accomplishing item 1 above in a flight simulator. Several requirements apply:
 - the alternate method described in paragraph I below must be used;
 - the individual must be an authorized check pilot for an operator whose line-observation program includes approval of this alternate method; and
 - That operator's procedures and callouts must be utilized.

A contract check pilot who meets these requirements for one air operator need not meet these requirements for multiple operators in a 12-month period; accomplishment of one operator's line-performance program in the simulator is considered sufficient.

I. ALTERNATE METHOD

An acceptable alternate method of accomplishing the requirements of 135.337(f)(1), 135.338(f)(1), 121.411(f)(1), 121.412(f)(1) and/or 142.53(b)(1) for part 142 flight instructors and an air operator's contract flight instructors or contract check pilots who **only** instruct or check in simulators that replicate eligible aircraft is a Line Operational Simulation (LOS) that incorporates the following:

- LOS must consist of 2 hours acting as pilot in command and as pilot flying. It must include a minimum of two flight segments and at least two takeoffs and two landings must be made as sole manipulator of the controls.
- Simulator freeze, slew and unrealistic winds aloft may not be used. Simulator reposition may be accomplished only in accordance with Air Transportation Division policy on reposition during the suspension of testing and checking events (see http://www.faa.gov/pilots/training/part_142/media/acceptable_policy_on_simulator_reposition.pdf).
- A realistic preflight planning session must be included, considering weather, fuel, performance, weight/balance considerations, company procedures and paperwork and dispatch or flight following as applicable. Maintenance issues should be included in the scenario for consideration and proper resolution by the pilot in command. One hour minimum time is suggested for preflight crew briefing and paperwork.
- The LOS must consist of a fully planned and scripted line operations flight (from preflight planning to securing of the aircraft at the end of the flight) representative of the type of flight operations conducted in one aircraft type in which the instructor/contract check airman instructs. For check airmen, the LOS must represent a typical operation for one air operator for whom the check airman holds checking authorization.
- If the LOS scenario is included in an air carrier's approved training program, it should, in addition to the other requirements listed, include selected operational problems that require the practical application of such things as the operating regulations, operations specifications requirements and limitations, and specific operator procedures (including at least one opportunity for maintenance interface) to resolve.
- Crew complement: if two contract instructors or check pilots are conducting an LOS together, they should both be qualified and using the same operator's LOS script and procedures. When an air carrier's approved LOS scenario is being conducted, representatives of that carrier should be present whenever possible to conduct the LOS and to observe and correct, where necessary, the following of company procedures. This observation provides a valuable opportunity to observe contract personnel to determine if they are suited to service as contract check pilot and may fit in well as part of an operator's required biennial audit of a training provider.

- The LOS is a training event, not a checking event. Satisfactory completion is a regulatory requirement, however, and the nature of an instructor's or check airman's performance should be evaluated by any company representative or POI present in the course of their exercise of proper operational control over their authorized check airmen.
- An air carrier's approved LOS program in lieu of actual aircraft operation should include objective evaluation guidelines to assist air carrier personnel in their task of determining satisfactory performance.
- If conducted by an air carrier, each LOS scenario requires POI approval and operator control of courseware and supporting materials. Operators should periodically revise scenarios to reflect special emphasis items of current interest. For example, currently all scenarios should emphasize runway safety including complex taxi clearances at an airport with a high fidelity visual model during dark and/or low visibility conditions. Emphasis should be on proper ground handling to avoid runway incursion, minimize time on active runways, and crew confirmation and coordination regarding correct takeoff/landing runways and crossing clearances.
- Realistic ATC communications and current NAS procedures must be scripted including special emphasis on the ground operations cited above.
- Realistic ground environments at airports; visual models used must be at least Class II (see 14 CFR part 60) and shall be equivalent in accuracy and fidelity to those used for simulator certification. Modeling of all ground movement areas must be correct (including FBO ramp areas, airport signage, etc.) Generic visual scenes shall not be used during LOS scenarios.
- Completion must be documented using the operator's approved method, if an operator's LOS is completed.
- If the LOS is completed to meet the requirements of 142.53(b)(1) the satisfactory completion should be clearly noted in the flight instructor or training center evaluator's training records.